



USPTO

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: The ACM Digital Library The Guide

THE GUIDE TO COMPUTING LITERATURE

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)
Semantic search on Internet tabular information extraction for answering queries
Full text Pdf (198 KB)

Source [Conference on Information and Knowledge Management archive](#)
Proceedings of the ninth international conference on Information and knowledge management [table of contents](#)
 McLean, Virginia, United States
 Pages: 243 - 249
 Year of Publication: 2000
 ISBN:1-58113-320-0

Authors [H. L. Wang](#) Institute of Information Science, Academia Sinica
[S. H. Wu](#)
[I. C. Wang](#)
[C. L. Sung](#) Department of Computer Science, National Tsing Hua University
[W. L. HSU](#) Institute of Information Science, Academia Sinica
[W. K. Shih](#) Department of Computer Science, National Tsing Hua University

Sponsors [SIGMIS](#): ACM Special Interest Group on Management Information Systems
[SIGIR](#): ACM Special Interest Group on Information Retrieval

Publisher ACM Press New York, NY, USA

Additional Information: [references](#) [cited by](#) [index terms](#) [collaborative colleagues](#) [peer to peer](#)

Tools and Actions: [Find similar Articles](#) [Review this Article](#)
[Save this Article to a Binder](#) Display Formats: [BibTex](#) [EndNote](#) [ACM Ref](#)

DOI Bookmark: Use this link to bookmark this Article: <http://doi.acm.org/10.1145/354756.354825>
[What is a DOI?](#)

↑ REFERENCES

Note: OCR errors may be found in this Reference List extracted from the full text article. ACM has opted to expose the complete List rather than only correct and linked references.

- 1 [Xinxin Wang , Derick Wood, Tabular abstraction, editing, and formatting, 1996](#)
- 2 [Matthew Hurst , Shona Douglas, Layout and Language: Preliminary Investigations in Recognizing the Structure of Tables, Proceedings of the 4th International Conference on Document Analysis and Recognition, p.1043-1047, August 18-20, 1997](#)
- 3 Douglas, Shona, Hurst, M., & Quinn, D. (1995). "Using Natural Language Processing for Identifying and Interpreting Tables in Plain Text," Proceedings of the Fourth Annual Symposium on Document Analysis and Information Retrieval, pp.535-546, Las Vegas, Nevada. University of Nevada.
- 4 Hurst, Matthew (1999), "Layout and Language: Beyond Simple Text for Information Interaction - Modelling The Table," Proceedings of The 2nd International Conference on Multimodal Interfaces, Hong Kong

- 5 Wen-Lian Hsu, Yi-Shiou Chen and Yuan-Kai Wang (1998), "A Context sensitive model for concept understanding," Proceedings of ITALLC 98, pp.161-169.
- 6 Wen-Lian Hsu, Yi-Shiou Chen and Yuan-Kai Wang (1999), "Natural language agents-An agent society on the Internet," Proceedings of PRIMA 99.
- 7 Chun-Nan Hsu and Chien-Chi Chang. "Finite-State Transducers for Semi-Structured Text Mining (1999)," Proceedings of IJCAI-99 Workshop on Text Mining: Foundations, Techniques and Applications, Stockholm, Sweden.
- 8 Huei-Long Wang, W.L.Hsu, Y.S.Chen, T.L.Lau, C.H. Tang, H. M. Yeh, W. K. Shih (1999), "A Streamlined Approach for Tabular Information Extraction," Proceedings of NCS99.
- 9 Chun-Nan Hsu , Craig A. Knoblock, Semantic Query Optimization for Query Plans of Heterogeneous Multidatabase Systems, IEEE Transactions on Knowledge and Data Engineering, v.12 n.6, p.959-978, November 2000 [doi>10.1109/69.895804]

↑ CITED BY 2



Chung-Hsien Wu , Jui-Feng Yeh , Ming-Jun Chen, Domain-specific FAQ retrieval using independent aspects, ACM Transactions on Asian Language Information Processing (TALIP), v.4 n.1, p.1-17, March 2005

Aleksander Pivk , Philipp Cimiano , York Sure , Matjaz Gams , Vladislav Rajkovič , Rudi Studer, Transforming arbitrary tables into logical form with TARTAR, Data & Knowledge Engineering, v.60 n.3, p.567-595, March, 2007

↑ INDEX TERMS

Primary Classification:

H. Information Systems

↳ H.3 INFORMATION STORAGE AND RETRIEVAL

↳ H.3.3 Information Search and Retrieval

↳ **Subjects:** Search process

Additional Classification:

H. Information Systems

↳ H.2 DATABASE MANAGEMENT

↳ H.2.4 Systems

↳ **Subjects:** Query processing

↳ H.2.8 Database applications

↳ **Subjects:** Data mining

↳ H.3 INFORMATION STORAGE AND RETRIEVAL

↳ H.3.1 Content Analysis and Indexing

↳ **Subjects:** Indexing methods

↳ H.4 INFORMATION SYSTEMS APPLICATIONS

↳ H.4.3 Communications Applications

↳ **Nouns:** Internet

General Terms:

Design, Languages, Management, Measurement, Performance, Theory

Keywords:

data mining, information extraction, semantic query, table understanding

↑ Collaborative Colleagues:

W. L. Hsu: Y. S. Chen
C. N. Hsu
W. K. Shih
C. L. Sung
H. L. Wang
I. C. Wang
Y. L. Wang
S. H. Wu

W. K. Shih: Y. S. Chen
C. N. Hsu
W. L. Hsu
C. L. Sung
H. L. Wang
I. C. Wang
Y. L. Wang
S. H. Wu

C. L. Sung: W. L. Hsu
W. K. Shih
H. L. Wang
I. C. Wang
S. H. Wu

H. L. Wang: Y. S. Chen
C. N. Hsu
W. L. Hsu
W. K. Shih
C. L. Sung
I. C. Wang
Y. L. Wang
S. H. Wu

I. C. Wang: W. L. Hsu
W. K. Shih
C. L. Sung
H. L. Wang
S. H. Wu

S. H. Wu: W. L. Hsu
W. K. Shih
C. L. Sung
H. L. Wang
I. C. Wang

↑ Peer to Peer - Readers of this Article have also read:

- Constructing reality **Proceedings of the 11th annual international conference on Systems documentation**
Douglas A. Powell , Norman R. Ball , Mansel W. Griffiths
- M⁴: a metamodel for data preprocessing **Proceedings of the 4th ACM international**

workshop on Data warehousing and OLAP

Anca Vaduva , Jörg-Uwe Kietz , Regina Zücker

- Data structures for quadtree approximation and compression **Communications of the ACM**
28, 9
Hanan Samet
- A hierarchical single-key-lock access control using the Chinese remainder theorem **Proceedings of the 1992 ACM/SIGAPP Symposium on Applied computing**
Kim S. Lee , Huizhu Lu , D. D. Fisher
- An intelligent component database for behavioral synthesis **Proceedings of the 27th ACM/IEEE conference on Design automation**
Gwo-Dong Chen , Daniel D. Gajski

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

Web [Images](#) [Video](#) [News](#) [Maps](#) [Gmail](#) [more](#) ▾

[Sign in](#)

Google

concept features extraction query result

Search

[Advanced Search](#)
[Preferences](#)

New! [View and manage your web history](#)

Web [Books](#) Results 1 - 10 of about 1,200,000 for **concept features extraction query result** . (0.23 seconds)

Book results for **concept features extraction query result**



[Managing Information Technology in a Global ...](#) - by Mehdi Khosrowpour

[Encyclopedia of microcomputers](#) - by Allen Kent, James G. Williams, Rosalind Kent, ...

[International Journal of Medical Informatics : A generic concept ...](#)

A strict separation of **feature extraction**, **feature storage**, **feature comparison**, ... To provide satisfying **query results**, multiple levels of content ...

linkinghub.elsevier.com/retrieve/pii/S1386505606000566 - [Similar pages](#)

[PDF] [New concepts for remote sensing information dissemination: query ...](#)

enhancement, image segmentation, **feature extraction**, fitting **Query processing**. **query engine**. Step. 3:. Retrieve **query results** ...

ieeexplore.ieee.org/iel5/6246/16792/00774622.pdf - [Similar pages](#)

[PDF] [A User-Oriented Multimodal-Interface Framework for General Content ...](#)

feature-extraction based methods can partially satisfy. the needs for multimedia retrieval, ... **query results**. The system will learn from this process ...

ieeexplore.ieee.org/iel5/10203/32544/01521547.pdf?arnumber=1521547 - [Similar pages](#)

[[More results from ieeexplore.ieee.org](#)]

[Semantic concept-based query expansion and re-ranking for ...](#)

These **concepts** are then used to generate additional **query results** and/or to ... University TRECVID-2006 Video Search and High-Level **Feature Extraction**. ...

portal.acm.org/citation.cfm?id=1291448 - [Similar pages](#)

[Paper] [A Content-based Image Retrieval using FFT & Cosine ...](#)

Obstacles such as simple **feature-extraction** algorithms and involvement of the 2 **Query performance Result Name Format** (.jpg) Distance value Rank lilly ...

www.actapress.com/PDFViewer.aspx?paperId=15711 - [Similar pages](#)

[PDF] [Columbia University TRECVID-2005 Video Search and High-Level ...](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

Task: High-Level **Feature Extraction**. In TRECVID 2005, we specifically explored the from the text **query** in **concept** space. This approach is applied to ...

www.ee.columbia.edu/~lyndon/pubs/trecvid2005-cu.pdf - [Similar pages](#)

[IMKA System](#)

The **feature** centroids of the **concept** are used as the visual **query** for each **concept**.

Finally, the **results** of all the queries are merged into a unique list ...

www.ee.columbia.edu/~ana/imka/imka_system.html - 16k - [Cached](#) - [Similar pages](#)

[[More results from www.ee.columbia.edu](#)]

[PDF] [From Features to Semantics: Some Preliminary Results](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

called **concepts**, so that a **query** which uses a particular used in the following **feature extraction** process. For each. pixel of the resulting image, ...

www.cs.sunysb.edu/~rzhao/publications/ICME00.pdf - [Similar pages](#)

[V2_Lab . SuMMeR](#)

In the **query/result** layer, queries fired from the user interface were transformed ...
FEATURE EXTRACTION AND CONCEPT DERIVATION. For the V2_ Demonstrator, ...
lab.v2.nl/projects/summer.html - 17k - [Cached](#) - [Similar pages](#)

Columbia's Content-Based Visual Query Project

The SaFe system finds the images that best match the **query**. SaFe uses fully automatic tools for **region/feature extraction** and indexing. ...
www.ctr.columbia.edu/~sfchang/vis-project/ - 22k - [Cached](#) - [Similar pages](#)

1 [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) **Next**

Download [Google Pack](#): free essential software for your PC

concept features extraction query re

[Search within results](#) | [Language Tools](#) | [Search Tips](#) | [Dissatisfied? Help us improve](#)

©2007 Google - [Google Home](#) - [Advertising Programs](#) - [Business Solutions](#) - [About Google](#)



[Web](#) [Images](#) [Video](#) [News](#) [Maps](#) [more »](#)

concept features extraction query result

1999

- 2001

Ad
Sc
Sc

Scholar [All articles](#) - [Recent articles](#) Results 1 - 10 of about 3,890 for **concept features extraction** !

All Results

[Y Rui](#)

[T Huang](#)

[S Chang](#)

[J Wang](#)

[A Del Bimbo](#)

[Content-based image retrieval in medical applications: A novel multi-step approach - all 9 versions »](#)

TM Lehmann, B Wein, J Dahmen, J Bredno, F ... - Proceedings SPIE, 2000 - phobos.imib.rwth-aachen.de

... The separation of local **feature extraction** and **feature** selection is the ... are not modeled in the **feature** layer [2 ... is emphasized by the hierarchical blob-**concept**. ...

Cited by 59 - [Related Articles](#) - [View as HTML](#) - [Web Search](#)

[From features to semantics: some preliminary results - all 6 versions »](#)

R Zhao, WI Grosky - Multimedia and Expo, 2000. ICME 2000. 2000 IEEE ..., 2000 - ieeexplore.ieee.org

... That is, the same semantic **concept** will usually be ... will be used in the following **feature extraction** process. ... Given the **feature** vector V_q of a subimage, q , of a ...

Cited by 35 - [Related Articles](#) - [Web Search](#)

[Image retrieval: current techniques, promising directions and open issues - all 15 versions »](#)

Y Rui, TS Huang, SF Chang - Journal of Visual Communication and Image Representation, 1999 - students.iiit.ac.in

... aspects, including visual **feature extraction**, multidimensional indexing, and system design Page 13. ... 5.2. High-level **Concepts** and Low-level Visual **Features** ...

Cited by 681 - [Related Articles](#) - [Web Search](#) - [BL Direct](#)

[Key-frame extraction and shot retrieval using nearest feature line \(NFL\) - all 5 versions »](#)

L Zhao, W Qi, SZ Li, SQ Yang, HJ Zhang - Proceedings of the 2000 ACM workshops on Multimedia, 2000 - portal.acm.org

... image and a shot based on the **concept** of Nearest ... 2.2 Key-frame **Extraction** for NFL-based Retrieval Let f_1, f_2, \dots, f_N be the **feature** points corresponding to ...

Cited by 32 - [Related Articles](#) - [Web Search](#)

[SIMPLicity: semantics-sensitive integrated matching for picturelibraries - all 13 versions »](#)

JZ Wang, J Li, G Wiederhold - Pattern Analysis and Machine Intelligence, IEEE Transactions ..., 2001 - ieeexplore.ieee.org

... The segmentation **result** is fed into a classifier that ... the querying process, if the **query** image is ... first passed through the same **feature extraction** process as ...

Cited by 505 - [Related Articles](#) - [Web Search](#) - [BL Direct](#)

[Water-Filling: a novel way for image structural feature extraction - all 3 versions »](#)

XS Zhou, Y Rui, TS Huang - ICIP'99, 1999 - ifp.uiuc.edu

... 4. **Feature Extraction** ... Some of the **features** are not always reasonable for the **concept**, such as the green background in this case. ...

Cited by 27 - [Related Articles](#) - [View as HTML](#) - [Web Search](#)

[Face recognition using the nearest feature line method - all 11 versions »](#)

SZ Li, J Lu - Neural Networks, IEEE Transactions on, 1999 - ieeexplore.ieee.org
... to develop a theory to justify the NFL **concept**. ... classification is performed in two stages: 1) eigen-**feature extraction**. ... and is used as a prototype **feature point** ...
[Cited by 138](#) - [Related Articles](#) - [Web Search](#) - [BL Direct](#)

[Edge-based structural features for content-based image retrieval - all 5 versions](#) »


XS Zhou, TS Huang - Pattern Recognition Letters, 2001 - ifp.uiuc.edu
... Wavelet Variances (WV) (100 tigers as **query** images) Tigers ... may not be relevant to the **concept** in the ... to go is to do segmentation and local **feature extraction**. ...
[Cited by 60](#) - [Related Articles](#) - [View as HTML](#) - [Web Search](#)

[Building Visual Vocabulary for Image Indexation and Query Formulation - all 2 versions](#) »

JH Lim - Pattern Analysis & Applications, 2001 - Springer
... are sub-labels for specific instances of **concept** i, and ... Visual Vocabulary for Image Indexation and **Query** ... For texture, we adopted the Gabor **features**, which have ...
[Cited by 24](#) - [Related Articles](#) - [Web Search](#) - [BL Direct](#)

[MultiView: Multilevel video content representation and retrieval - all 5 versions](#) »

J Fan, WG Aref, AK Elmagarmid, MS Hacid, MS ... - Journal of Electronic Imaging, 2001 - link.aip.org
... Object **extraction results** from "News." First frame: (a) original image; (b ... and classification of the data points in **feature** space and in **concept** space. ...
[Cited by 34](#) - [Related Articles](#) - [Web Search](#) - [BL Direct](#)

Google 

Result Page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#)

[Google Home](#) - [About Google](#) - [About Google Scholar](#)

©2007 Google



[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: The ACM Digital Library The Guide

SEARCH

THE GUIDE TO COMPUTING LITERATURE



[Feedback](#) [Report a problem](#) [Satisfaction](#)

[survey](#)

International Multimedia Conference; Vol. 9 [archive](#)

Proceedings of the ninth ACM international conference on Multimedia
2001, Ottawa, Canada *September 30 - October 05, 2001*

Additional Information: [full citation](#), [abstract](#)



[Purchase a print copy](#)

Conference Chairs [Nicolas D. Georganas](#) University of Ottawa
[Radu Popescu-Zeletin](#) GMD Fokus

Table of Contents

Session: [Keynote](#)

[TeleExperience: communicating compelling experience](#)

Ramesh Jain

Pages: 1 - 1

Full text available: [Pdf\(117 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [citings](#), [index terms](#)

Session: [Video Applications](#)

[Building an intelligent camera management system](#)

Yong Rui, Liwei He, Anoop Gupta, Qiong Liu

Pages: 2 - 11

Full text available: [Pdf\(830 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

[Improvising camera control for capturing meeting activities using a floor plan](#)

Shingo Uchihashi

Pages: 12 - 18

Full text available: [Pdf\(1.39 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

[Design of a virtual auditorium](#)

Milton Chen

Pages: 19 - 28

Full text available: [Pdf\(1.08 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Session: [Video Processing](#)

[Multimedia edges: finding hierarchy in all dimensions](#)

Malcolm Slaney, Dulce Ponceleon, James Kaufman

Pages: 29 - 40

Full text available: [Pdf\(6.41 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

[Motion-based segmentation and contour-based classification of video objects](#)

Gerald Kühne, Stephan Richter, Markus Beier

Pages: 41 - 50


Full text available: [Pdf\(1.74 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

On clustering and retrieval of video shots

Chong-Wah Ngo, Ting-Chuen Pong, Hong-Jiang Zhang

Pages: 51 - 60

Full text available:  Pdf(17.79 MB)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: **Streaming 1**

Stream enhancements for the CORBA event service

Desmond Chambers, Gerard Lyons, Jim Duggan

Pages: 61 - 69

Full text available:  Pdf(519 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Efficient and scalable on-demand data streaming using UEP codes

Lihao Xu

Pages: 70 - 78

Full text available:  Pdf(1.64 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Optimal delivery of multi-media content over networks

Arthur Allen

Pages: 79 - 88

Full text available:  Pdf(4.39 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: **Image Retrieval**

Adaptive nearest neighbor search for relevance feedback in large image databases

P. Wu, B. S. Manjunath

Pages: 89 - 97

Full text available:  Pdf(1.38 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Extraction of feature subspaces for content-based retrieval using relevance feedback

Zhong Su, Stan Li, Hongjiang Zhang

Pages: 98 - 106

Full text available:  Pdf(3.00 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Support vector machine active learning for image retrieval

Simon Tong, Edward Chang

Pages: 107 - 118

Full text available:  Pdf(1.57 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: **Video Retrieval and Browsing**

Learning video browsing behavior and its application in the generation of video previews

Tanveer Syeda-Mahmood, Dulce Ponceleon

Pages: 119 - 128

Full text available:  Pdf(1.86 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Multimedia retrieval through spatio-temporal activity maps

Gopal Pingali, Agata Opalach, Ingrid Carlbom

Pages: 129 - 136


Full text available:  Pdf(8.23 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Comparing discriminating transformations and SVM for learning during multimedia retrieval

Xiang Sean Zhou, Thomas S. Huang

Pages: 137 - 146

Full text available:  Pdf(1.15 MB)


Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Session: **Streaming 2**

Server-based smoothing of variable bit-rate streams

Stergios V. Anastasiadis, Kenneth C. Sevcik, Michael Stumm

Pages: 147 - 158

Full text available:  Pdf(851 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Distributing media transformation over multiple media gateways

Wei Tsang Ooi, Robbert van Renesse

Pages: 159 - 168

Full text available:  Pdf(228 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

ReMDoR: remote multimedia document retrieval over partial order transport

Phillip T. Conrad, Armando Caro, Paul Amer

Pages: 169 - 180

Full text available:  Pdf(1.41 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Panel Session: **Plenary Panel**

Is streaming media becoming mainstream?

Savitha Srinivasan, Dulce Ponceleon, Dick Bulterman, Edward Delp, Alexandros Eleftheriadis, Pablo

Fernicola, Rob Lanphier, See-Mong Tan

Pages: 181 - 186

Full text available:  Pdf(85 KB)

Additional Information: [full citation](#), [references](#), [citings](#), [index terms](#)

Session: **Audio Processing**

Pause concepts for audio segmentation at different semantic levels

Silvia Pfeiffer

Pages: 187 - 193


Full text available:  Pdf(176 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A compressed domain beat detector using MP3 audio bitstreams

Ye Wang, Miikka Vilermo

Pages: 194 - 202

Full text available:  Pdf(260 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

A robust audio classification and segmentation method

Lie Lu, Hao Jiang, HongJiang Zhang

Pages: 203 - 211

Full text available:  Pdf(432 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#), [review](#)

Session: **Network Games**

Modelling user behaviour in networked games

Tristan Henderson, Saleem Bhatti

Pages: 212 - 220


Full text available:  Pdf(373 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Consistency control for distributed interactive media

Jürgen Vogel, Martin Mauve

Pages: 221 - 230


Full text available:  Pdf(444 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Coordinated CPU and event scheduling for distributed multimedia applications

Christian Poellabauer, Karsten Schwan, Richard West

Pages: 231 - 240

Full text available:  Pdf(959 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: Authoring Support

DEMAIS: designing multimedia applications with interactive storyboards

Brian P. Bailey, Joseph A. Konstan, John V. Carlis

Pages: 241 - 250

Full text available:  Pdf(1.04 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Designing annotation before it's needed

Frank Nack, Wolfgang Putz

Pages: 251 - 260


Full text available:  Pdf(1.16 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Automatic detection of 'Goal' segments in basketball videos

Surya Nepal, Uma Srinivasan, Graham Reynolds

Pages: 261 - 269

Full text available:  Pdf(183 KB)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: Video Storage

System support for providing integrated services from networked multimedia storage servers

Ravi Wijayaratne, A. L. Narasimha Reddy

Pages: 270 - 279

Full text available:  Pdf(227 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Periodic broadcast and patching services: implementation, measurement, and analysis in an internet streaming video testbed

Michael K. Bradshaw, Bing Wang, Lixin Gao, Jim Kurose, Prashant Shenoy, Don Towsley, Subhabrata Sen

Pages: 280 - 290

Full text available:  Pdf(798 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Bandwidth allocation in a self-managing multimedia file server

Vijay Sundaram, Prashant Shenoy

Pages: 291 - 301

Full text available:  Pdf(299 KB)


Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Session: Coding and Encryption

On error preserving encryption algorithms for wireless video transmission

Ali Saman Saman Tosun, Wu-chi Feng

Pages: 302 - 308

Full text available:  Pdf(158 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Scene context dependent rate control

Anthony G. Nguyen, Jenq-Neng Hwang

Pages: 309 - 318


Full text available:  Pdf(724 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

An image watermarking technique using pyramid transform

Qiang Cheng, Thomas S. Huang

Pages: 319 - 328

Full text available:  Pdf(1.90 MB)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: **Exploiting Video**

Panoramic video capturing and compressed domain virtual camera control

Xinding Sun, Jonathan Foote, Don Kimber, B. S. Manjunath

Pages: 329 - 347


Full text available:  Pdf(1.86 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

FlyAbout: spatially indexed panoramic video

Don Kimber, Jonathan Foote, Surapong Lertsithichai

Pages: 339 - 347


Full text available:  Pdf(15.75 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Spatially-encoded far-field representations for interactive walkthroughs

Andrew Wilson, Ketan Mayer-Patel, Dinesh Manocha

Pages: 348 - 357

Full text available:  Pdf(1.39 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: **Industrial Session**

Computer technologies that support Kansei expression using the body

Ryohei Natatsu, Makoto Tadenuma, Tadao Maekawa

Pages: 358 - 364


Full text available:  Pdf(921 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Speech-driven cartoon animation with emotions

Yan Li, Feng Yu, Ying-Qing Xu, Eric Chang, Heung-Yeung Shum

Pages: 365 - 371


Full text available:  Pdf(3.03 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Scalable streaming of JPEG2000 images using hypertext transfer protocol

Sachin Deshpande, Wenjun Zeng

Pages: 372 - 381

Full text available:  Pdf(1.49 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Exploring benefits of non-linear time compression

Liwei He, Anoop Gupta

Pages: 382 - 391

Full text available:  Pdf(672 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Session: **Multimedia Processing**

Bi-level video: video communication at very low bit rates

Jiang Li, Gang Chen, Jizheng Xu, Yong Wang, Hanning Zhou, Keman Yu, King To Ng, Heung-Yeung Shum

Pages: 392 - 400

Full text available:  Pdf(741 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Hierarchical filtering method for content-based music retrieval via acoustic input

Jyh-Shing Roger Jang, Hong-Ru Lee

Pages: 401 - 410

Full text available:  Pdf(723 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Supporting audiovisual query using dynamic programming

Milind R. Naphade, Roy Wang, Thomas S. Huang

Pages: 411 - 420

Full text available:  Pdf(2.79 MB)


Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Session: **Voice over IP**

A conference gateway supporting interoperability between SIP and H.323

Jiann-Min Ho, Jia-Cheng Hu, Peter Steenkiste

Pages: 421 - 430

Full text available:  Pdf(805 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Real-time voice communication over the internet using packet path diversity

Yi J. Liang, Eckehard G. Steinbach, Bernd Girod

Pages: 431 - 440

Full text available:  Pdf(604 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Intra-flow loss recovery and control for VoIP

Henning Sanneck, Nguyen Tuong Long Le, Adam Wolisz, Georg Carle

Pages: 441 - 454

Full text available:  Pdf(1.05 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Session: **Doctoral Symposium**

Creating an immersive broadcast experience

Marcelle A. Stienstra

Pages: 455 - 456

Full text available:  Pdf(814 KB)

Additional Information: [full citation](#), [references](#), [citings](#), [index terms](#)

An integrated framework for interactive multimedia presentations in distributed multimedia systems

Ramazan Savaş Aygü

Pages: 457 - 458


Full text available:  Pdf(843 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Media transcoding for pervasive computing

Zhijun Lei

Pages: 459 - 460

Full text available:  Pdf(356 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Supporting QoS for ubiquitous multimedia service delivery

Yi Cui, Klara Nahrstedt

Pages: 461 - 462


Full text available:  Pdf(1.30 MB)

Additional Information: [full citation](#), [references](#), [citings](#), [index terms](#)

Priority-progress streaming for quality-adaptive multimedia

Charles Krasic, Jonathan Walpole

Pages: 463 - 464

Full text available:  Pdf(867 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Session: Posters and Short Papers

Spatial navigation of media streams

Steele Arbeeny, Deborah Silver

Pages: 467 - 470

Full text available:  Pdf(1.28 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Middle-tier for multimedia synchronization

Ramazan Savaş Aygün, Aidong Zhang

Pages: 471 - 474


Full text available:  Pdf(1.02 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Similarity queries in the DISIMA image DBMS

Vincent Oria, M. Tamer Özsu, Shu Lin, Paul J. Iglinski

Pages: 475 - 478

Full text available:  Pdf(1.48 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Classification of summarized videos using hidden markov models on compressed chromaticity signatures

Cheng Lu, Mark S. Drew, James Au

Pages: 479 - 482


Full text available:  Pdf(705 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

SVG for navigating digital news video

Michael G. Christel, Chang Huang

Pages: 483 - 485

Full text available:  Pdf(1.68 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Subband image segmentation using VQ for content-based image retrieval

Junchul Chun, George Stockman

Pages: 486 - 488


Full text available:  Pdf(1.07 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Robust digital image watermarking using DWT, DFT and quality based average

Eduardo Fullea, José M. Martinez

Pages: 489 - 491


Full text available:  Pdf(529 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

Experiences with MPEG-4 multimedia streaming

Hassan Shojania, Baochun Li

Pages: 492 - 494

Full text available:  Pdf(565 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

An integrated framework for face modeling, facial motion analysis and synthesis

Pengyu Hong, Zhen Wen, Thomas Huang

Pages: 495 - 498

Full text available:  Pdf(2.37 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

LinStar texture: a fuzzy logic CBIR system for textures

Hsin-Chih Lin, Chih-Yi Chiu, Shi-Nine Yang

Pages: 499 - 501

Full text available:  Pdf(8.40 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Combined-media video tracking for summarization

Jianying Hu, Jialin Zhong, Amit Bagga

Pages: 502 - 505


Full text available:  Pdf(1.84 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Fast client-server video summarization for continuous capture

John Dixon, Charles B. Owen

Pages: 506 - 508

Full text available:  Pdf(488 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Indexing for efficient processing of noise-free queries

Khanh Vu, Kien A. Hua, JungHwan Oh

Pages: 509 - 511

Full text available:  Pdf(1.07 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Content-sensitive video streaming over low bitrate and lossy wireless network

Kun Tan, Richard Ribier, Shih-Ping Liou

Pages: 512 - 515


Full text available:  Pdf(1.04 MB)

Additional Information: [full citation](#), [references](#), [index terms](#)

A practical approach for modeling the quality of multimedia data

Kwan-Sang Na, Doo-Kwon Baik, Pan-Koo Kim

Pages: 516 - 518

Full text available:  Pdf(560 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Ubiquitous media agents for managing personal multimedia files

Liu Wenyin, Zheng Chen, Fan Lin, Rui Yang, Mingjing Li, Hongjiang Zhang

Pages: 519 - 521

Full text available:  Pdf(552 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Visual query tools for uncertain spatio-temporal data

Katherine Malan, Gary Marsden, Edwin Blake

Pages: 522 - 524

Full text available:  Pdf(1.67 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Affect computing in film through sound energy dynamics

Simon Moncrieff, Chitra Dorai, Svetha Venkatesh

Pages: 525 - 527

Full text available:  Pdf(595 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Preemptive bandwidth allocation protocol for multicast, multi-streams environments

Nawel Chefai, Nicolas D. Georganas, Gregor V. Bochmann

Pages: 528 - 530


Full text available:  Pdf(1.06 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Image indexing & retrieval using intermediate features

Mohamad Obeid, Bruno Jedynak, Mohamed Daoudi

Pages: 531 - 533


Full text available:  Pdf(3.08 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A tele-immersive, virtual laboratory approach based on real-time streaming of 3D scene sequences

Stephan Olbrich, Helmut Pralle

Pages: 534 - 537

Full text available:  Pdf(3.76 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

A new approach for rotated face detection

Qiang Zhu, Jiashi Chen

Pages: 537 - 539

Full text available:  Pdf(1.58 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Authoring and execution environments for multimedia applications featuring robotic actors

Nikitas M. Sgouros, Sophia Kousidou

Pages: 540 - 542

Full text available:  Pdf(1.28 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

FIRM: fuzzily integrated region matching for content-based image retrieval

Yixin Chen, James Z. Wang, Jia Li

Pages: 543 - 545


Full text available:  Pdf(592 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Integrated broadband environment for personalized TV experience (IBEX): implementation study and practice

Yoshihisa Gonno, Fumihiko Nishio, Tomohiro Tsunoda, Yasuaki Yamagishi

Pages: 546 - 548

Full text available:  Pdf(527 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Mitigating impact of starting new session in zoned disk

Youjip Won, Kyeongsun Cho, Seung-Min Park

Pages: 549 - 551

Full text available:  Pdf(540 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A new foreground extraction scheme for video streams

Zhengping Wu, Chun Chen

Pages: 552 - 554

Full text available:  Pdf(1.53 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Automated authoring of coherent multimedia discourse in conversation systems

Michelle X. Zhou, Shimei Pan

Pages: 555 - 558

Full text available:  Pdf(2.26 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Model-based face and lip animation for interactive virtual reality applications

Michel D. Bondy, Nicolas D. Georganas, Emil M. Petriu, Dorina C. Petriu, Marius D. Cordea, Thomas E. Whalen

Pages: 559 - 563


Full text available:  Pdf(4.29 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Personalizing video recorders using multimedia processing and integration

Nevenka Dimitrova, Radu Jasinschi, Lalitha Agnihotri, John Zimmerman, Thomas McGee, Dongge Li

Pages: 564 - 567

Full text available:  Pdf(1.89 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Digital audio watermarking based-on multiple-bit hopping and human auditory system

Changsheng Xu, Yongwei Zhu, David Dagan Feng

Pages: 568 - 571


Full text available:  Pdf(613 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Motion based object tracking in MPEG-2 stream for perceptual region discriminating rate transcoding

Javed I. Khan, Zhong Guo, Wansik Oh

Pages: 572 - 576

Full text available:  Pdf(3.44 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)**Automated basis-view and match-point selection for the ArchVision RPC image-based model**

Charles S. Carpenter, W. Brent Seales, Christopher Jaynes, Randall Stevens

Pages: 577 - 581

Full text available:  Pdf(2.17 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**Technique for eliminating irrelevant terms in term rewriting for annotated media retrieval**


Y. C. Park, P. K. Kim, F. Golshani, S. Panchanathan

Pages: 582 - 584

Full text available:  Pdf(2.35 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)**The evolutionary sound synthesis method**

Jônatas Manzollî, Adolfo Maia, Jr., Jose Fornari, Furio Damiani

Pages: 585 - 587

Full text available:  Pdf(2.02 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)Session: **Demonstrations****Software systems for virtual university operations**

Timothy K. Shih

Pages: 591 - 592

Full text available:  Pdf(348 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**Interactive media on demand: generic recording and replay of interactive media streams**

Volker Hilt, Martin Mauve, Jürgen Vogel, Wolfgang Effelsberg

Pages: 593 - 594

Full text available:  Pdf(1.42 MB)Additional Information: [full citation](#), [references](#), [index terms](#)**Demonstration of a distributed MPEG-7 video search and retrieval application in the educational domain**

Mark van Setten, Erik Oltmans

Pages: 595 - 596

Full text available:  Pdf(1.33 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**Portrait video phone**

Jiang Li, Keman Yu, Gang Chen, Yong Wang, Hanning Zhou, Jizheng Xu, King To Ng, Kaibo Wang, Lijie Wang, Heung-Yeung Shum

Pages: 597 - 598

Full text available:  Pdf(364 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**Content-based retrieval applications on a common database management system**

Naoko Kosugi, Go Nishimura, Junji Teramoto, Kazuyoshi Mii, Makoto Onizuka, Seiichi Kon'ya, Akira Kojima, Ryoji Kataoka, Takashi Honishi, Kazuhiko Kushima

Pages: 599 - 600

Full text available:  Pdf(1.33 MB)Additional Information: [full citation](#), [references](#), [index terms](#)**A flexible image retrieval and multimedia presentation management system for multimedia databases**

Shu-Ching Chen, Mei-Ling Shyu, Xia Jin, Qiong Chen, Chengcui Zhang, Jeff Strickrott

Pages: 601 - 602


Full text available:  Pdf(200 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A broadband web-based application for video sharing and annotation

Bruno Emond, Martin Brooks, Arnold Smith

Pages: 603 - 604


Full text available:  Pdf(1.07 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

vCOM: virtual commerce in a collaborative 3D world

Xiaojun Shen, Saeid Nourian, Isabelle Hertanto, Nicolas Georganas

Pages: 605 - 606


Full text available:  Pdf(241 KB)

Additional Information: [full citation](#), [abstract](#), [index terms](#)

Java multimedia telecollaboration

Jauvane C. de Oliveira, François Malric, Dongsheng Yang, Saeid Nourian, Nicolas D. Georganas

Pages: 607 - 608


Full text available:  Pdf(525 KB)

Additional Information: [full citation](#), [abstract](#), [index terms](#)

Demonstration of improved multimedia streaming by using content-aware video scaling

Avanish Tripathi, Mark Claypool

Pages: 609 - 610

Full text available:  Pdf(356 KB)

Additional Information: [full citation](#), [references](#), [index terms](#)

PBIR: perception-based image retrieval-a system that can quickly capture subjective image query concepts

Edward Chang, Kwang-Ting Cheng, Wei-Cheng Lai, Ching-Tung Wu, Chengwei Chang, Yi-Leh Wu

Pages: 611 - 614


Full text available:  Pdf(999 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Indexing and retrieval of 3D models aided by active learning

Cha Zhang, Tsuhan Chen

Pages: 615 - 616

Full text available:  Pdf(1.49 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Resource adaptive netcentric systems: a case study with SONET - a self-organizing network embedded transcoder

Javad I. Khan, Seung Su Yang, Qiong Gu, Darsan Patel, Patrick Mail, Oleg Komogortsev, Wansik Oh, Zhong Guo

Pages: 617 - 620

Full text available:  Pdf(1.88 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Collaborative virtual environments for training

Mojtaba Hosseini, Nicolas D. Georganas

Pages: 621 - 622

Full text available:  Pdf(1.73 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Real-time personalized sports video filtering and summarization

Di Zhong, Raj Kumar, Shih-Fu Chang

Pages: 623 - 625


Full text available:  Pdf(1.02 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

MPEG-L/MRP: implementing adaptive streaming of MPEG videos for interactive internet applications

S. Boll, W. Klas, M. Menth, C. Heinlein

Pages: 626 - 627


Full text available:  Pdf(1.54 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

SARI: self-authentication-and-recovery image watermarking system

Ching-Yung Lin, Shih-Fu Chang

Pages: 628 - 629

Full text available:  Pdf(1.53 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**IMKA: a multimedia organization system combining perceptual and semantic knowledge**


Ana B. Benitez, Shih-Fu Chang, John R. Smith

Pages: 630 - 631

Full text available:  Pdf(46 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**CPU/power-constrained mobile devices**


Richard Han, Ching-Yung Lin, John R. Smith, Belle Tseng, Vida Ha

Pages: 632 - 633

Full text available:  Pdf(1.47 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**ELM-N: e-learning media navigator**

Chitra Dorai, Parviz Kermani, Avare Stewart

Pages: 634 - 635

Full text available:  Pdf(885 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)**Super MBox: an efficient/effective content-based music retrieval system**


Jyh-Shing Roger Jang, Hong-Ru Lee, Jiang-Chun Chen

Pages: 636 - 637

Full text available:  Pdf(1.73 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)**Periodic broadcast and patching services: implementation, measurement, and analysis in an internet streaming video testbed**

Michael K. Bradshaw, Bing Wang, Subhabrata Sen, Lixin Gao, Jim Kurose, Prashant Shenoy, Don Towsley

Pages: 638 - 639

Full text available:  Pdf(1.41 MB)Additional Information: [full citation](#), [references](#), [index terms](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)




[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: The ACM Digital Library The Guide

SEARCH

THE GUIDE TO COMPUTING LITERATURE

 [Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Extraction of feature subspaces for content-based retrieval using relevance feedback

Full text  Pdf (3.00 MB)

Source **International Multimedia Conference; Vol. 9** [archive](#)
Proceedings of the ninth ACM international conference on Multimedia [table of contents](#)
 Ottawa, Canada
 Session: Image Retrieval [table of contents](#)
 Pages: 98 - 106
 Year of Publication: 2001
 ISBN:1-58113-394-4

Authors **Zhong Su** Tsinghua University, Beijing, China
Stan Li Microsoft Research China, Beijing, China
Hongjiang Zhang Microsoft Research China, Beijing, China

Sponsors **SIGMULTIMEDIA**: ACM Special Interest Group on Multimedia
SIGCOMM: ACM Special Interest Group on Data Communication
SIGGRAPH: ACM Special Interest Group on Computer Graphics and Interactive Techniques

Publisher ACM Press New York, NY, USA

Additional Information: [abstract](#) [references](#) [cited by](#) [index terms](#) [collaborative colleagues](#) [peer to peer](#)

Tools and Actions: [Find similar Articles](#) [Review this Article](#)
[Save this Article to a Binder](#) Display Formats: [BibTex](#) [EndNote](#) [ACM Ref](#)


DOI Bookmark: Use this link to bookmark this Article: <http://doi.acm.org/10.1145/500141.500158>
[What is a DOI?](#)

↑ ABSTRACT




In the past few years, relevance feedback (RF) has been used as an effective solution for content-based image retrieval (CBIR). Although effective, the RF-CBIR framework does not address the issue of feature extraction for dimension reduction and noise reduction. In this paper, we propose a novel method for extracting features for the class of images represented by the positive images provided by subjective RF. Principal Component Analysis (PCA) is used to reduce both noise contained in the original image features and dimensionality of feature spaces. The method increases the retrieval speed and reduces the memory significantly without sacrificing the retrieval accuracy.

↑ REFERENCES

Note: OCR errors may be found in this Reference List extracted from the full text article. ACM has opted to expose the complete List rather than only correct and linked references.

-  1 [Chris Buckley, Gerard Salton, Optimization of relevance feedback weights, Proceedings of the 18th annual international ACM SIGIR conference on Research and development in information retrieval, p.351-357, July 09-13, 1995, Seattle, Washington, United States](#)

[doi>[10.1145/215206.215383](https://doi.org/10.1145/215206.215383)]

- 2 [S. Chandrasekaran , B. S. Manjunath , Y. F. Wang , J. Winkeler , H. Zhang, An eigenspace update algorithm for image analysis, Graphical Models and Image Processing, v.59 n.5, p.321-332, Nov. 1997 \[doi>\[10.1006/gmip.1997.0425\]\(https://doi.org/10.1006/gmip.1997.0425\) \]](#)
- 3 Cox, I. J., Minka, T. P., Papathomas, T. V. and Yianilos, P. N. "The Bayesian Image Retrieval System, PicHunter: Theory, Implementation, and Psychophysical Experiments" IEEE Transactions on Image Processing -- special issue on digital libraries, 2000
- 4 [K. I. Diamantaras , S. Y. Kung, Principal component neural networks: theory and applications, John Wiley & Sons, Inc., New York, NY, 1996](#)
- 5  [Christos Faloutsos , King-Ip Lin, FastMap: a fast algorithm for indexing, data-mining and visualization of traditional and multimedia datasets, Proceedings of the 1995 ACM SIGMOD international conference on Management of data, p.163-174, May 22-25, 1995, San Jose, California, United States \[doi>\[10.1145/568271.223812\]\(https://doi.org/10.1145/568271.223812\)\]](#)
- 6 [Keinosuke Fukunaga, Introduction to statistical pattern recognition \(2nd ed.\), Academic Press Professional, Inc., San Diego, CA, 1990](#)
- 7 [Yoshiharu Ishikawa , Ravishankar Subramanya , Christos Faloutsos, MindReader: Querying Databases Through Multiple Examples, Proceedings of the 24rd International Conference on Very Large Data Bases, p.218-227, August 24-27, 1998](#)
- 8 [M. Kirby , L. Sirovich, Application of the Karhunen-Loeve Procedure for the Characterization of Human Faces, IEEE Transactions on Pattern Analysis and Machine Intelligence, v.12 n.1, p.103-108, January 1990 \[doi>\[10.1109/34.41390\]\(https://doi.org/10.1109/34.41390\) \]](#)
- 9 Lee, C., Ma, W. Y., and Zhang, H. J. "Information Embedding Based on user's relevance Feedback for Image Retrieval," Technical Report HP Labs, 1998.
- 10  [Ye Lu , Chunhui Hu , Xingquan Zhu , HongJiang Zhang , Qiang Yang, A unified framework for semantics and feature based relevance feedback in image retrieval systems, Proceedings of the eighth ACM international conference on Multimedia, p.31-37, October 2000, Marina del Rey, California, United States \[doi>\[10.1145/354384.354403\]\(https://doi.org/10.1145/354384.354403\)\]](#)
- 11 Meilhac, C. and Nastar, C. "Relevance Feedback and Category Search in Image Databases", IEEE International Conference on Multimedia Computing and Systems, Italy, 1999.
- 12 Ng, Raymond and Sedighian, Andishe. "Evaluating multi-dimensional indexing structures for images transformed by principal component analysis". Proc. SPIE Storage and Retrieval for Image and Video Databases, 1996
- 13 Roberto Brunelli and Omella Mich. "Image Retrieval by Examples'. IEEE Trans. On Multimedia. Vol. 2. No. 3, September 2000.
- 14 Rocchio, Jr., J. J.(1971). Relevance feedback in information retrieval. The SMART Retrieval System: Experiments in Automatic Document Processing (Salton, G. eds) pp313-323. Prentice-Hall
- 15 Rui, Y., and Huang, T. S. "Relevance Feedback: A Power Tool for Interactive Content-Based Image Retrieval", IEEE Circuits and systems for Video technology, vol. 8, no.5 1999
- 16  [Yong Rui , Thomas S. Huang, A novel relevance feedback technique in image retrieval, Proceedings of the seventh ACM international conference on Multimedia \(Part 2\), p.67-70, October 30-November 05, 1999, Orlando, Florida, United States \[doi>\[10.1145/319878.319896\]\(https://doi.org/10.1145/319878.319896\)\]](#)
- 17 [Gerard Salton , Michael J. McGill, Introduction to Modern Information Retrieval, McGraw-](#)

Hill, Inc., New York, NY, 1986

- 18 W. M. Shaw, Jr., Term-relevance computations and perfect retrieval performance, Information Processing and Management: an International Journal, v.31 n.4, p.491-498, July 1995 [doi> 10.1016/0306-4573(95)00011-5]
- 19 Stone, H. S. and Li, C. S. "Image matching by means of intensity and texture matching in the Fourier domain," in Proc. IEEE Int. Conf. Image Processing. Santa Barbara. CA. Ott 1997.
- 20 Using Bayesian classifier in relevant feedback of image retrieval, Proceedings of the 12th IEEE International Conference on Tools with Artificial Intelligence, p.258, November 13-15, 2000
- 21 Su, Z., Zhang, H and Ma, S. "Relevant Feedback using a Bayesian Classifier in Content-Based Image Retrieval" SPIE Electronic Imaging 2001, January 2001, San Jose, CA
- 22 Vasconcelos, N., and Lippman, A. "Learning from user feedback in image retrieval systems" NIPS'99, Denver, Colorado, 1999.

↑ CITED BY 7

- ◆ Weihong Huang , Ting Tao , Mohand-Saïd Hacid , Alain Mille, Facilitate knowledge communications, Proceedings of the 1st ACM international workshop on Multimedia databases, November 07-07, 2003, New Orleans, LA, USA
- ◆ Rui Li , Bir Bhanu , Anlei Dong, Coevolutionary feature synthesized EM algorithm for image retrieval, Proceedings of the 13th annual ACM international conference on Multimedia, November 06-11, 2005, Hilton, Singapore
- ◆ Xiaofei He, Incremental semi-supervised subspace learning for image retrieval, Proceedings of the 12th annual ACM international conference on Multimedia, October 10-16, 2004, New York, NY, USA
- Xiaoxia xie , Yao zhao , Zhenfeng zhu, A comprehensive analysis for relevance feedback in CBIR system, Proceedings of the 24th IASTED international conference on Signal processing, pattern recognition, and applications, p.183-188, February 15-17, 2006, Innsbruck, Austria
- ◆ Mei-Ling Shyu , Shu-Ching Chen , Min Chen , Chengcui Zhang , Kanoksri Sarinnapakorn, Image database retrieval utilizing affinity relationships, Proceedings of the 1st ACM international workshop on Multimedia databases, November 07-07, 2003, New Orleans, LA, USA
- ◆ Feng Jing , Mingjing Li , Hong-Jiang Zhang , Bo Zhang, An effective region-based image retrieval framework, Proceedings of the tenth ACM international conference on Multimedia, December 01-06, 2002, Juan-les-Pins, France
- Jing Peng, Multi-class relevance feedback content-based image retrieval, Computer Vision and Image Understanding, v.90 n.1, p.42-67, April 2003

↑ INDEX TERMS

Primary Classification:

H. Information Systems

↳ H.3 INFORMATION STORAGE AND RETRIEVAL

↳ H.3.3 Information Search and Retrieval

↳ **Subjects:** Relevance feedback

Additional Classification:**H. Information Systems**↳ **H.3 INFORMATION STORAGE AND RETRIEVAL**↳ **H.3.1 Content Analysis and Indexing**↳ **Subjects: Indexing methods**↳ **H.3.3 Information Search and Retrieval**↳ **Subjects: Retrieval models****General Terms:**

Algorithms, Design, Performance

Keywords:Bayesian estimation, content-based image retrieval (CBIR), principal component analysis (PCA), relevance feedback**↑ Collaborative Colleagues:**Stan Li: Zhong Su
Hongjiang ZhangZhong Su: Zheng Chen
Mingjing Li
Stan Li
Ye Lu
Qiang Yang
Hong-Jiang Zhang
HongJiang Zhang
Hongjiang Zhang

Hongjiang Zhang:	Kap Luk Chan	Anil K. Jain	Weiyang Ma	Liu Wenyin
	Jinlin Chen	Kevin Jeffay	Jin Shi	Qiufeng Wu
	Longbin Chen	Wei Jiang	John Smith	Dong Xu
	Zheng Chen	Oliver King	Stephen W. Smoliar	Shuicheng Yan
	Qiansheng Cheng	Mingjing Li	Zhong Su	Qiang Yang
	Qiu Fengwu	Mingjing Li	Yanfeng Sun	Rui Yang
	Borko Furht	Stan Li	Qi Tian	Dong Zhang
	Xiaodong Gu	Fan Lin	Qi Tian	Lei Zhang
	Xiaofei He	Zheng kai Liu	Changhu Wang	Peng Zhao
	Xiaofei He	Chien Yong Low	Yijin Wang	Yu Zhong
	Chunhui Hu	Ye Lu	Yongmei Wang	Baoyao Zhou
	Yuxiao Hu	Wei-Ying Ma	Yongmei Michelle Wang	

↑ Peer to Peer - Readers of this Article have also read:

- Constructing reality **Proceedings of the 11th annual international conference on Systems documentation**
Douglas A. Powell , Norman R. Ball , Mansel W. Griffiths
- M⁴: a metamodel for data preprocessing **Proceedings of the 4th ACM international workshop on Data warehousing and OLAP**
Anca Vaduva , Jörg-Uwe Kietz , Regina Zücker
- Data structures for quadtree approximation and compression **Communications of the ACM**
28, 9

Hanan Samet

- A hierarchical single-key-lock access control using the Chinese remainder theorem **Proceedings of the 1992 ACM/SIGAPP Symposium on Applied computing**
Kim S. Lee , Huizhu Lu , D. D. Fisher
- An intelligent component database for behavioral synthesis **Proceedings of the 27th ACM/IEEE conference on Design automation**
Gwo-Dong Chen , Daniel D. Gajski

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11	extract\$4 with concept with document with result and knowledge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 09:48
L2	2	"20060224400".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 09:45
L3	66	extract\$4 with concept with result and knowledge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 09:48
L4	66	extract\$4 with concept with result and knowledge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 09:49
L5	12	extract\$4 with concept with result and knowledge with (DAG or MAP or taxonomy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 12:57
L25	11	extract\$4 with concept with result and knowledge with (DAG or MAP or taxonomy) and (search\$4 or query)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 13:20
L26	27	extract\$4 with concept with (search\$4 or query) and knowledge with (DAG or MAP or taxonomy) and (search\$4 or query) same result	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 13:36
L27	23	extract\$4 with concept with (search\$4 or query) and knowledge with (DAG or MAP or taxonomy) and (search\$4 or query) same result same concept	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 13:39

EAST Search History

L28	23	extract\$4 with concept with (search\$4 or query) and knowledge with (DAG or MAP or taxonomy) and (search\$4 or query) same result same concept and concept	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 14:14
L29	23	extract\$4 with concept with result and (DAG or MAP or taxonomy) same (search\$4 or query) and concept	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 14:29
L30	2	"7092936".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 14:29
L31	1	"7092936".pn. and concept	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 14:30
L32	1	"7092936".pn. and "retrieved documents using linguistic extraction features"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 14:30

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L34	4	extract\$4 with feature with concept with result and knowledge	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 14:59
L35	2	extract\$4 with feature with concept with result with document	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 14:59
L36	25	extract\$4 with feature with concept with document	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 15:01
L37	16	extract\$4 with feature with concept with document and (query or search\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 15:17
L38	2	"6,263,335".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/16 15:18